



Micro Commercial Components  
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**MB05M  
 THRU  
 MB10M**

**Features**

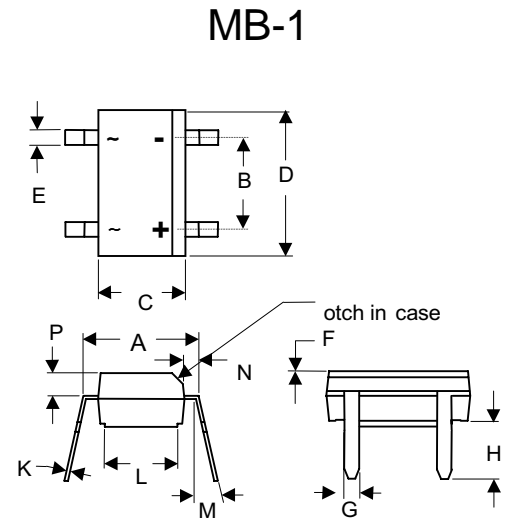
- Through Hole Package
- Glass Passivated Diode Construction
- Moisture Resistant Epoxy Case
- High Surge Current Capability

**0.5Amp Single Phase  
 Glass Passivated  
 Bridge Rectifier  
 50 to 1000 Volts**

**Maximum Ratings**

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MB05M	---	50V	35V	50V
MB1M	---	100V	70V	100V
MB2M	---	200V	140V	200V
MB4M	---	400V	280V	400V
MB6M	---	600V	420V	600V
MB8M	---	800V	560V	800V
MB10M	---	1000V	700V	1000V



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	0.5A	$T_A = 40^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 0.5\text{A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 0.5mA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DIM	DIMENSIONS				NOTE
	INC HES		MM		
	MIN	MAX	MIN	MAX	
A	.195	.205	4.95	5.21	
B	.095	.105	2.41	2.67	
C	1.45	.155	3.68	3.94	
D	.180	.190	4.57	4.83	
E	.019	0.27	0.48	0.71	
F	0.96	.100	2.44	2.54	
G	.038	.047	0.96	1.19	
H	.100	---	25.40	---	
J	.008	.012	0.20	0.30	
K	.007	.013	.018	0.33	
L	.107	.117	2.72	2.97	
M	0	10	0	10	
D	.020	.028	.051	0.71	

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 1%

**MB05M thru MB10M**

Figure 1  
Typical Forward Characteristics

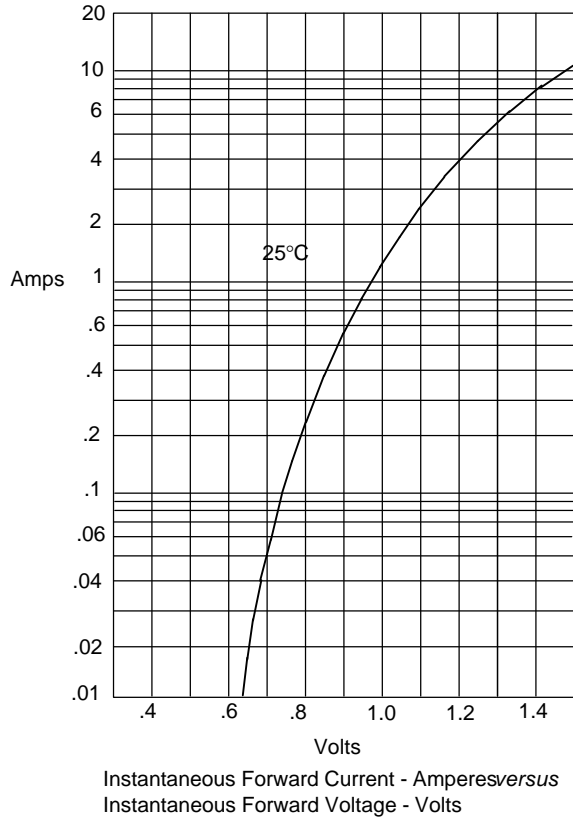


Figure 2  
Typical Reverse Characteristics

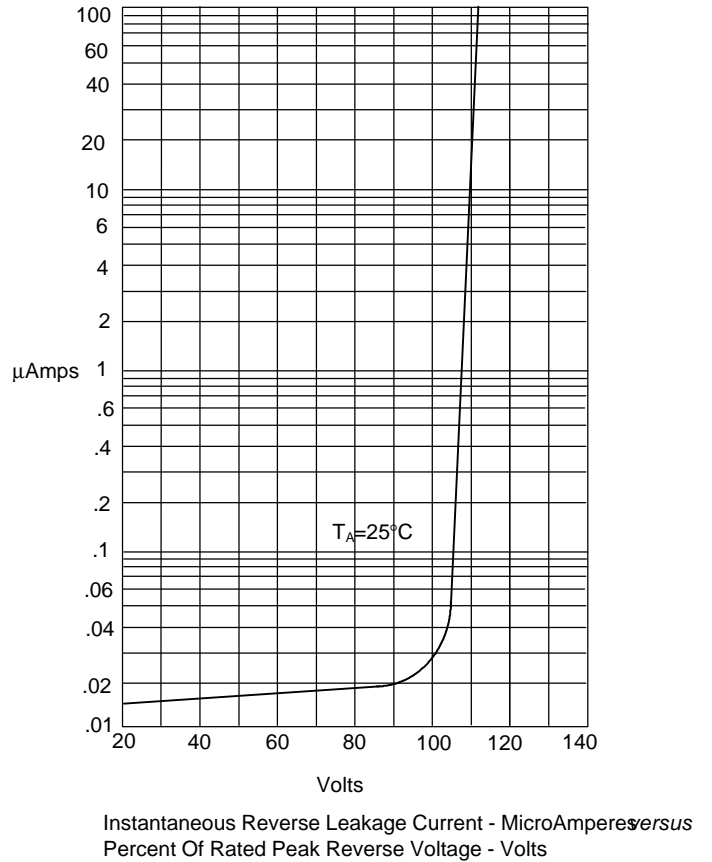


Figure 3  
Forward Derating Curve

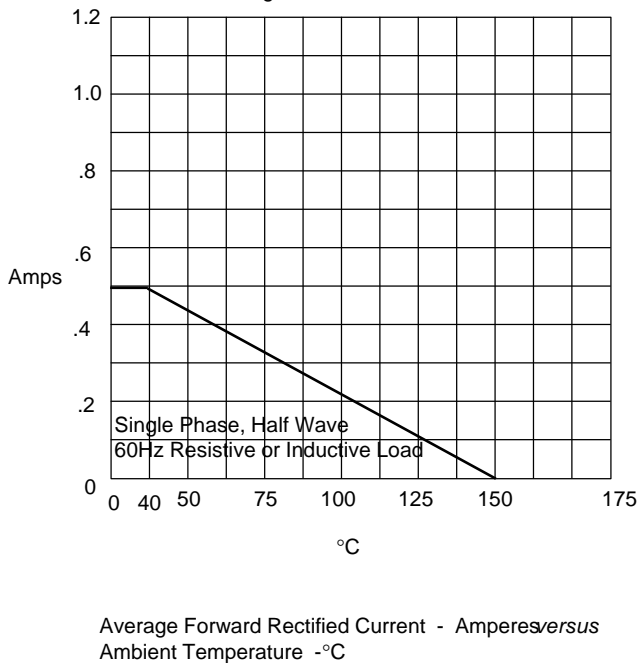


Figure 4  
Peak Forward Surge Current

